



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,672	07/25/2003	Daisuke Sakiyama	032567-019	1827
7590 03/18/2008 BURNS, DOANE, SWECKER & MATHIS, L.L.P. P.O. Box 1404 Alexandria, VA 22313-1404			EXAMINER QIN, YIXING	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 03/18/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/626,672

Applicant(s)

SAKIYAMA ET AL.

Examiner

Yixing Qin

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 9-23 and 27-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date 7/25/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of in the reply filed on 12/17/07 is acknowledged. The traversal is on the ground(s) that that claim 1 is generic to Groups I and II. Claim 1 is not generic to group II (claims 2,3) the Examiner has decided that it would not be a great burden to examine these claims. Also, the Examiner acknowledges that Group III is indeed a method, not an apparatus, but still directed towards a different invention.

Regarding Groups I and III being able to be classified in the same class, subclass, it is true that these claims could be in the same subclass, but they are still directed towards different inventions and are not obvious variants of each other. As the arguments state the Examiner further alleges that the species are independent or distinct because they are in different fields of search and/or different inventions as disclosed above. Satisfying one of these criteria (different inventions) is sufficient for the restriction.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2625

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over
Mishima (U.S. Patent No. 6,381,031)

Regarding claim 1, Mishima discloses a data processing apparatus, comprising:
one or a plurality of input portions; (Fig. 6, items 9, 10 – CCD and image
processor)

one or a plurality of output portions; (Fig. 6, item 200 - printer)
a plurality of compressing/expanding devices which compress data-to-be-
outputted included in a job inputted from any one of said input portions (column 5, lines
1-14 – image data is compressed to code data) and expand the compressed data-to-be-
outputted; (column 5, lines 15-23 – code data is expanded to image data and sent
through the output buffer to the printer)

It does not explicitly disclose “ a job discrimination portion which discriminates
whether the job inputted from any one of said input portions is not required to be
outputted without delay; ”

However, column 1, lines 14-20 – discloses that the image data read in is
compressed and stored. Then, when it is requested, the compressed data is
expanded. Also in column 5, lines 37-39, Mishima discloses that when image data are
only stored, the all the processors are set for compression. The only storing is

analogous to a job that is not required to be outputted without delay. Basically image data of the job is stored and held until it is needed to be expanded and printed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have had a decision whether a job is to be outputted without delay.

The motivation would have been to efficiently use the compression/expansion devices as Mishima is trying to do above.

Therefore, it would have been obvious to improve Mishima to obtain the invention as specified.

Mishima further discloses a controller which controls operation assignment of said plurality of compressing/expanding devices depending on a discrimination result of said job discrimination portion and activates assigned compressing/expanding devices for the job. (Column 5, lines 25-54 – the CPU is the control that sets whether each compression/expansion processor is to compress or expand depending on the amount of data to be inputted to the memory unit 13 or read out of it.)

II. Claims 2-4, 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima (U.S. Patent No. 6,381,031) in view of Nomura (U.S. PG Pub. No. 2001/0048823)

Regarding claim 2 , Mishima discloses a plurality of compression expansion devices for efficiently processing image data.

It does not explicitly disclose the type of job and hence not "wherein said any one of output portions is a printer portion, and wherein the job not required to be outputted without delay is a store print job including a confidential print job and an initially-conduct-first-set-of-print job."

However, Nomura disclose in P[0077] that a job can be a confidential job. In P[0085] it discloses that the job can be a print test job in which a single copy is printed prior to printing all of the job. (this is what the initially-conduct-first-set-of-print job does.)

Mishima and Nomura are combinable because both are in the art of forming images.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have performed particular jobs in the Mishima invention.

The motivation would have been to improve Mishima's invention by allowing it to process more types of jobs.

Therefore, it would have been obvious to combine Mishima and Nomura to obtain the invention as specified.

Regarding claim 3, the secondary reference, Nomura, discloses wherein said any one of output portions is a printer portion, and wherein the job not required to be

outputted without delay is a facsimile-receive job or an internet-facsimile- receive job to be inputted from outside. (P{0077})

Regarding claim 4 , Mishima discloses the data processing apparatus as recited in claim 1, wherein, in cases where said job discrimination portion discriminates that the job is not required to be outputted without delay, said controller changes the operation assignment of said compressing/expanding devices so as to expedite initiation of a subsequent job, and wherein, in cases where said job discrimination portion discriminates that the job is required to be outputted without delay, said controller changes the operation assignment of said compressing/expanding devices so as to enable early outputting of the job. (column 5, lines 37-65 that compression or expansion is set depending on how fast the data needs to be outputted. If it is just stored and held, then all devices are set to compression. While not explicitly stated, this setting of all devices to compression is to process the job as quickly as possible. One of ordinary skill would realize that subsequent jobs would be processed faster or earlier because of the setting of all devices to compression to complete a "store only" job. As the example in lines 55-65, the CPU changes operation of the devices in order to efficiently process and output M copies of N documents. This change in operation leads faster output of the documents.)

Regarding claim 6, Mishima discloses the data processing apparatus as recited in claim 4, wherein, in cases where said job discrimination portion discriminates that the

job is not required to be outputted without delay, said controller further changes the operation assignment of said compressing/expanding devices depending on the type of the job. (Fig. 24, and Fig. 17, S106, the assignment of the devices is dependent on the mode of the job)

III. Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima (U.S. Patent No. 6,381,031) in view of Motamed et al (U.S. P.G. Pub. No. 2002/0060801)

Regarding claim 7, the Mishima reference discloses a plurality of compression expansion devices for efficiently processing image data.

It does not explicitly disclose "in cases where a subsequent job is inputted from another input portion during the processing of the current job, said controller activates some of compressing/expanding devices set to be a standby state to execute compression processing of the subsequent job."

However, Motamed discloses in P[0017] that the multiple processors which are used in ripping files (i.e. compression) can perform this on one or more documents. In P[0054-0055], that jobs can be rushed through the system, and that one RIP can be used for a small job, while the rest of the RIPs can be used for a large job. While it does not explicitly state that which job is subsequent, it would be obvious to one of ordinary skill that Motamed's teachings are analogous to the claimed invention because they are both able to process two differing jobs given size or time constraints.

Mishima and Motamed are combinable because both are the art of using plural compression devices for faster job processing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used some resources to process an alternate job.

The motivation would have been to utilize all resources to maximize efficiency.

Therefore, it would have been obvious to combine Mishima and Motamed to obtain the invention as specified.

IV. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima (U.S. Patent No. 6,381,031) in view of Motamed et al (U.S. P.G. Pub. No. 2002/0060801) and further in view of Nomura (U.S. PG Pub. No. 2001/0048823)

Regarding claim 8, the Mishima reference discloses a plurality of compression expansion devices for efficiently processing image data.

It does not explicitly disclose "wherein, in cases where the job not required to be outputted without delay is a confidential print job, said controller sets more compressing/expanding devices than those required for another job not required to be outputted without delay to be a standby state. "

As mentioned above, the Nomura reference discloses printing confidential jobs. Also in P[0085] and Fig. 7 of Nomura, it discloses that a confidential job can be a large job. The Motamed reference has mentioned that more RIP processors are allocated to

Art Unit: 2625

large jobs in order to speed up the processing of the large jobs. Thus, the combination of the provided information from there two references would have been obvious to one of ordinary skill that at least large jobs which are confidential are allocated more processing (e.g. compression) resources.

All reference are combinable because they are in the art of efficient processing of files.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have allocated more resources to a particular type of file.

The motivation would have been to allow those particular types of files to be processed quicker because of size or importance.

Therefore, it would have been obvious to combine all referencesm to obtain the invention as specified.

V. Claims 5, 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima (U.S. Patent No. 6,381,031) in view of Moro (U.S. PG Pub. No. 2004/0095605)

Regarding claim 5 , the Mishima reference discloses a plurality of compression expansion devices for efficiently processing image data.

It does not explicitly disclose "in cases where said discrimination portion discriminates that the job is not required to be outputted without delay, said controller

Art Unit: 2625

assigns some of said plurality of compressing/expanding devices so as not to process the job, “

However, Moro discloses in Fig. 6 and column P[0035] that either a variable or fixed length compression/decompression or both is selected to process image data. Hence, whether data is to be without delay, if it is just monochromatic character data, then only a variable-length compression/decompression device is needed.

Mishima and Moro are combinable because both are in the art of using combined compression/expansion devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have performed processing using only some of the devices.

The motivation would have been to for certain type of data to be processed more efficiently (i.e. don't need all the processing devices to process "simpler" data such as characters)

Therefore, it would have been obvious to combine Mishima and Moro to obtain the invention as specified.

Mishima further discloses wherein, in cases where said discrimination portion discriminates that the job is required to be outputted without delay, said controller assigns all of said plurality of compressing/expanding so as to process the job. (column 5, lines 55-65)

Regarding claim 25 , Mishima discloses the data processing apparatus as recited in claim 5, wherein, in cases where said job discrimination portion discriminates that the job is not required to be outputted without delay, said controller further changes the operation assignment of said compressing/expanding devices depending on the type of the job. (Fig. 24, and Fig. 17, S106, the assignment of the devices is dependent on the mode of the job)

VI. Claim 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Mishima (U.S. Patent No. 6,381,031) in view of Moro (U.S. PG Pub. No. 2004/0095605) and further in view of Motamed et al (U.S. P.G. Pub. No. 2002/0060801)

Regarding claim 26, Mishima reference discloses a plurality of compression expansion devices for efficiently processing image data.

It does not explicitly disclose "the data processing apparatus as recited in claim 5, wherein, in cases where a subsequent job is inputted from another input portion during the processing of the current job, said controller activates some of compressing/expanding devices set to be a standby state to execute compression processing of the subsequent job"

However, Motamed discloses in P[0017] that the multiple processors which are used in ripping files (i.e. compression) can perform this on one or more documents. In

P[0054-0055], that jobs can be rushed through the system, and that one RIP can be used for a small job, while the rest of the RIPs can be used for a large job. While it does not explicitly state that which job is subsequent, it would be obvious to one of ordinary skill that Motamed's teachings are analogous to the claimed invention because they are both able to process two differing jobs given size or time constraints.

All reference are combinable because both are the art of using plural compression devices for faster job processing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used some resources to process an alternate job.

The motivation would have been to utilize all resources to maximize efficiency.

Therefore, it would have been obvious to combine all references to obtain the invention as specified.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YQ

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625